



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,905	04/03/2002	David Jay Duffield	RCA 89865	1250

7590

12/15/2005

Joseph S Tripoli
Thomson Multimedia Licensing Inc
PO Box 5312
Princeton, NJ 08543-5312

EXAMINER

GURSHMAN, GRIGORY

ART UNIT

PAPER NUMBER

2132

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,905

Applicant(s)

DUFFIELD ET AL.

Examiner

Grigory Gurshman

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/03/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Graunke (US Patent No. 6.731.758 B1).
2. Referring to the instant claims, Graunke discloses a digital video content transmission ciphering and deciphering method and apparatus (see abstract). Graunke teaches that a video source device generates a session key for each transmission session wherein a multi-frame video content is to be transmitted to a video sink device. The video source device uses the session key to generate a successive number of frame keys. The frame keys in turn are used to generate corresponding pseudo random

bit sequences for ciphering the corresponding frames to protect the video content from unauthorized copying during transmission. The video sink device practices a complementary approach to decipher the received video content. In one embodiment, both devices are each provided with an integrated block/stream cipher to practice the transmission protection method (see abstract).

3. Referring to the independent claims 1, 21, the limitation “receiving as the source device an approval code associated with the source and sink devices” is met by verification values (209) sent from video sink device (104) to video source device (102) –see Fig. 2. The limitation “determining, in the source device, a local code using data associated with the source and sink device” is met by generating the verification reference values (208 in Fig. 2). The limitation “comparing at least portion of the approval code to at least a portion of the local code” is met by verification (210 in Fig. 2).

5. Referring to the independent claim 19, the limitation “set up box” is met by unit 108A in Fig. 4.

6. Referring to the independent claims 13, the limitation “receiving at a first device a plurality of security keys with the content ; receiving the identifier at the first device to be used to provide the content to a second device; selecting one of the plurality of security keys using the first device; and providing the content to the second device using the first device and selected security key” is met by following teaching of Graunke:

FIG. 2 illustrates a process based method for providing video content from a source device to a sink device. Source and sink devices 102 and 104 are assumed to have

each been provided with an array of private keys and a complementary identifier by a certification authority. As illustrated, upon power on or reset, source device 102 first provides a basis value to the symmetric ciphering/deciphering process to sink device 104 (block 202). For the illustrated embodiment, the basis value is a random number (A_n). A_n may be generated in any one of a number of techniques known in the art. Additionally, source device 102 also provides its identifier (A_k) to sink device 104 (block 202). In response, sink device 104 replies with its identifier (B_k) (block 203). Upon exchanging the above information, source and sink devices 102 and 104 independently generate their respective copies of an authentication key (K_m) using A_k and B_k (block 204 and 205). For the illustrated embodiment, source device 102 generates its copy of K_m by summing private keys of its provided array indexed by B_k , while sink device 104 generates its copy of K_m by summing private keys of its provided array indexed by A_k . At this time, if both source and sink devices 102 and 104 are authorized devices, they both possess and share a common secret authentication key K_m .

7. Referring to the independent claims 5 and 17, Graunke teaches using device identifiers and validation by validation authority (see column 3, lines 1-5). Graunke inherently teaches the use of device serial numbers, because he teaches the use of unique device identifiers A_k and B_k .

8. Referring to claim 2, Graunke teaches that identifier is pre stored in the source device. Graunke inherently teaches hash calculation because he teaches enciphering and shuffling (see Fig. 8b).

9. Referring to claims 3 and 10, 11, 14 and 16 Graunke teaches the use of unique device identifiers Ak and Bk.

11. Referring to claims 6 and 7, Graunke teaches that the source and sink devices 102 and 104 have each been provided with an array of private keys and a complementary identifier by a certification authority.

12. Referring to claims 8 and 22, Graunke teaches the use of source device in a form of media player and the sink device in a form of digital television (see interface parts on sink and source devices in Fig. 4)

13. Referring to claim 12, Graunke teaches that if both source and sink devices 102 and 104 are authorized devices, they both possess and share a common secret authentication key Km. If authorization failed the communication will be delayed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

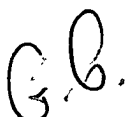
U.S. Patent No. 6,671,803 B1 to Pasieka

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

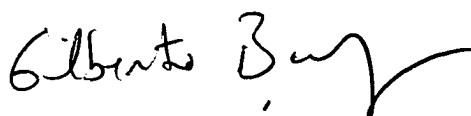
Art Unit: 2132

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GG 

Grigory Gurshman
Examiner
Art Unit 2132


GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100